THE INTERSECTION CURRENTLY OPERATES IN A FIVE-PHASE SEMI-ACTUATED MODE WITH EXCLUSIVE-PERMISSIVE LEFT TURN PHASES FOR NORTHBOUND AND SOUTHBOUND MD 197. THIS INTERSECTION INCLUDES NORTHBOUND AND SOUTHBOUND MD 197 PRE-EMPTION PHASES. THERE IS AN ATERNATE PEDESTRIAN PHASE BEING ADDED FOR THE EAST LEG OF THIS INTERSECTION.

EQUIPMENT LIST FOR CONTRACT NO. XX4395185

A EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADIMISTRATION

ITEM 9000 9000 9016 9570	QUANTITY 1 1 2 147 7 3 3 2 1 3 2 2 2 1	UNIT EA EA SF EA EA EA EA EA EA	DESCRIPTION SIZE 'S' CABINET WITH CONTROLLER AND VIDEO INTERFACE EQUIPMENT: 1–8 CAMERAS UNINTERUPTABLE POWER SUPPLY AND EQUIPMENT [UPDATED] 4 CHANNEL DETECTOR AMPLIFIER [UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN W11–2 (36" X 36") W16–7p(R) (30" X 18") W16–7p(L) (30" X 18") R3–7(R) (30" X 30") W6–3 (36" X 36") R4–7 (24" X 30") R5–1 (30" X 30") R6–1(L) (36" X 12") OM1–3 (18" X 18") W13–4(1) (24" X 36")
9571	125 4 3 1 1 1 1	SF EA EA EA EA EA	[UPDATED] SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN R10-3(1) (9" X 15") POLE MOUNTED D-3(1) (VAR. X 16") MAST ARM MOUNTED (DUAL-FACE) R3-6 (30" X 36") MAST ARM MOUNTED R3-5(L) (30" X 36") MAST ARM MOUNTED R3-5(R) (30" X 36") MAST ARM MOUNTED M1-5(6) (48" X 72") POLE MOUNTED M1-5(6) (30" X 48") POLE MOUNTED

B. EQUIPMENT	TO	RF	FURNISHED	ANDADR	INSTALLED	RY	THE	CONTRACTOR
D. LOON MILIT				, 11 ATT O1 I	1140171666	\Box	111	OCIVIII II ICIOII.

. EQUIPMEN ITEM	T TO BE FU QUANTITY		R INSTALLED BY THE CONTRACTOR. DESCRIPTION
1001	1	EA	MAINTANANCE OF TRAFFIC
2001	4	CY	CLASS 2 EXCAVATION
2002	1	CY	TEST PIT EXCAVATION
5001	1	EA	REMOVAL OF EXISTING PERMANENT PAVEMENT MARKINGS SYMBOLS OR LEGENDS
5003	600	LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS
5004	200	LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
5005	50	LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
5006	162	SF	WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LEGENDS AND SYMBOLS
6001	200	LF	STANDARD TYPE A COMBINATION CURB & GUTTER 12 INCH PAN 8 INCH DEPTH
6002	675	SF	5 INCH CONCRETE SIDEWALK
6003	30	SF	DETECTABLE WARNING SURFACE FOR CURB RAMPS
8001	27	EΑ	12 INCH LED SIGNAL HEAD SECTION
8002	1	EA	2-WIRE CENTRAL CONTROL UNIT
8004	6	EA	8 INCH LED SIGNAL HEAD SECTION
8007	2	EA	ANY SIZE LIGHTING ARN ON SIGNAL POLE WITH 250 WATT HPS LAMP AND LUMINAIRE
8008	4	EA	AUDIBLE TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGN
8009	3	EA	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8012	1	EA	EMBEDDED METERED SERVICE PEDESTAL
8014	1	EA	INSTALL CONTROLLER AND CABINET BASE MOUNT (ANY SIZE)
8016	2	EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
8021	1	EA	MAST ARM POLE & 70' MAST ARM ANY 'T' DIMENSION
8023	5	EA	NONINVASIVE DETECTOR (ANY LENGTH) LEAD IN CABLE UP TO 1000'
8024	1	EA	REMOVE & DISPOSE OF EQUIPMENT (PER ASSIGNMENT)
8027	1	EA	TWIN MAST ARM POLE & 50'/70' MAST ARMS ANY 'T' DIMENSION
8029	3	EA	VIDEO DETECTION CAMERA AND CABLE ANY LENGTH
8033	445	LF	4 CONDUCTOR OPTICOM CABLE
8034	850	LF	DISCONNECT, PULL-BACK & REROUTE CABLES
8035	300	LF	ELECTRICAL CABLE - 2-CONDUCTOR (NO. 12 AWG) TYPE T/C
8038	550	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED
8040	325	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
8041	275	LF	WOOD SIGN SUPPORTS UP TO 4' X 6'
8042	272	SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8044	350	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8047	15	LF	ELECTRICAL CABLE 1-CONDUCTOR NO. 8 AWG-THHN/THWN
8048	8	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8049	1	EA	DISCRIMINATOR MODULE, 4 CHANNEL, NO. 764
8051	2	EA	OPTICOM NO. 721 DETECTOR EYE
8055	975	LF	ELECTRICAL CABLE – 2 CONDUCTOR (NO. 14 AWG)
8057	560	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8058	1125	LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

C. EQUIPMENT TO BE REMOVED.

SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET, ALL OTHER EXISTING SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE SIGNAL.

PROJECT CONTACTS

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Ms. Mike Stocker Supervisor, Signal Warehouse Phone: (410) 787-7668

Power Company Representative - Baltimore Gas & Electric

Ms. Jacqueline Schultz 1068 N. Front Street PO Box 1475 Baltimore, MD 21202-1202 Phone: (410) 470-8445

FLASHING FL/Y|FL/Y|FL/Y|FL/Y|FL/Y|FL/R|FL/R|DARK|DARK **OPERATION** PRE-EMPTION 1 DW G OPERATION PRE-EMPTION 1 DW DW CHANGE PRE-EMPTION 2 DW DW OPERATION PRE-EMPTION 2 R R R R DW MD 197 IS ASSUMED TO RUN IN CHANGE A NORTH/SOUTH DIRECTION

-B,C,E,J,K,L,M,N,P,Q,a,c,d,j,k,m,x

PHASE 1 AND 5

PHASE 1 AND 6

1 AND 6 CHANGE

PHASE 2 AND 5

PHASE 2 AND 6

2 AND 6 CHANGE

5 CHANGE

PHASE 4

4 CHANGE

PHASE 4 ALT

PED CLEARANCE

4 ALT CHANGE

- A,B,C,D,E,J,K,L,M,N,P,x

a,b,c,d,e,f,g,h,j,k,l,m

- A,D,R,b,e,x

EXISTING UNDERGROUND VC SOUTH TO CHERRY LANE

7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

WIRING KEY

L,M,N,P

5 CONDUCTOR ELECTRICAL CABLE F,G,H,J,K(NO. 14 AWG) 2 CONDUCTOR ELECTRICAL CABLE (NO.14 AWG)

Q,R > ELECTRICAL CABLE - CONDUCTOR (NO. 12 AWG) TYPE T/C

d,e > 4 CONDUCTOR OPTICOM CABLE

f,g,h,j,k > NON-INVASIVE DETECTOR LEAD-IN

a,b,c > VIDEO CAMERA CABLE

RE-ROUTED INTERCONNECT CABLE

NO. 6 AWG STRANDED BARE

COPPER GROUND WIRE

PROPOSED POWER FEED

GROUND ROD

3 WIRE, ELECTRICAL CABLE 1-CONDUCTOR NO. 8 AWG-THHN/THWN

PHASE CHART

-G/G -G/G

| **←**Y/G | **←**Y/G |

←G/R ←G/R R ←G/R ←G/R

WIRING DIAGRAM

-B,C,E,K,M,N,P,Q,a,c,d,j,k,m,x

-B,E,N,Q,a,c,d,x

1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6

G

R

R

R

←G/G ←G/G G

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION MD 197 (LAULEL-BOWIE ROAD) AT BOWIE ROAD/CLUBHOUSE BOULEVARD LAUREL, MD

R DW

R DW DW

DW

DW |

DW

DW

DW |

WK

G FL/DWFL/DW

DW DW

DW DW

R |-G/G

R I∢-G/G

TOD NO: XX439-09 SHA NO: PG995B55

MD 197; Bowie Road/Clubhouse Road

EXISTING UNDERGROUND IC NORTH TO MORRIS DR DW

DW

GENERAL INFORMATION PLAN SHEET SCALE NONE ADVERTISED DATE 01/2012 CONTRACT NO. XX4395185 COUNTY PRINCE GEORGE'S LOGMILE 016019714.14 TIMS NO. _

BRUDIS & ASSOCIATES, INC. Consulting Engineers 9240 Rumsey Road; Suite C Columbia, Maryland 21045 -Phone 410-884-3607 www.brudis.com

K,P,x ¬

TOD NO. TS NO. 2623C DRAWING SHEET NO. 3 OF 3